

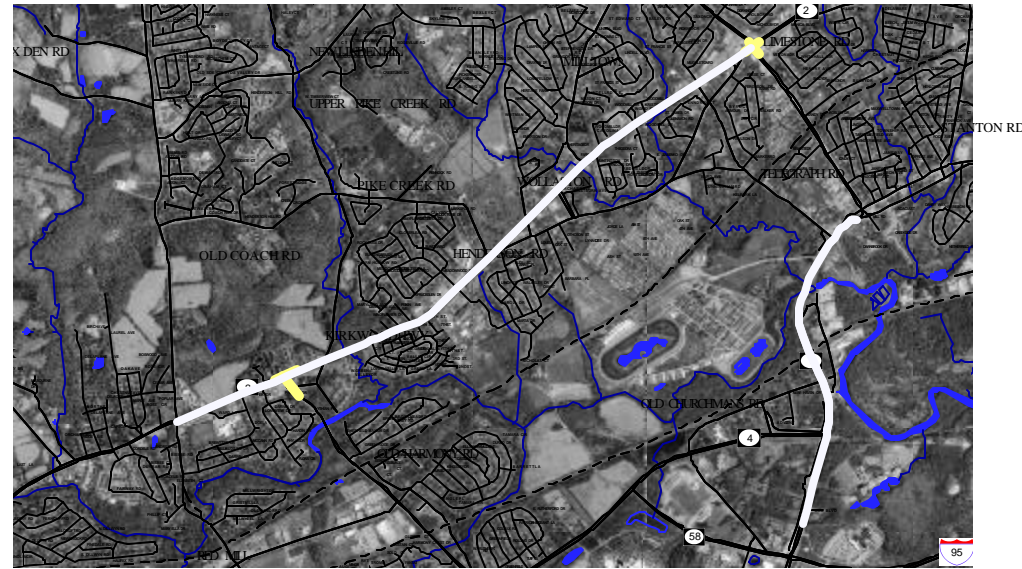
***NEW CASTLE  
COUNTY  
ARTERIAL  
ROADWAY  
IMPROVEMENTS***

**CHURCHMAN'S CROSSING IMPROVEMENTS****PROJECT SCOPE/DESCRIPTION:*****Multi –Modal Improvements***

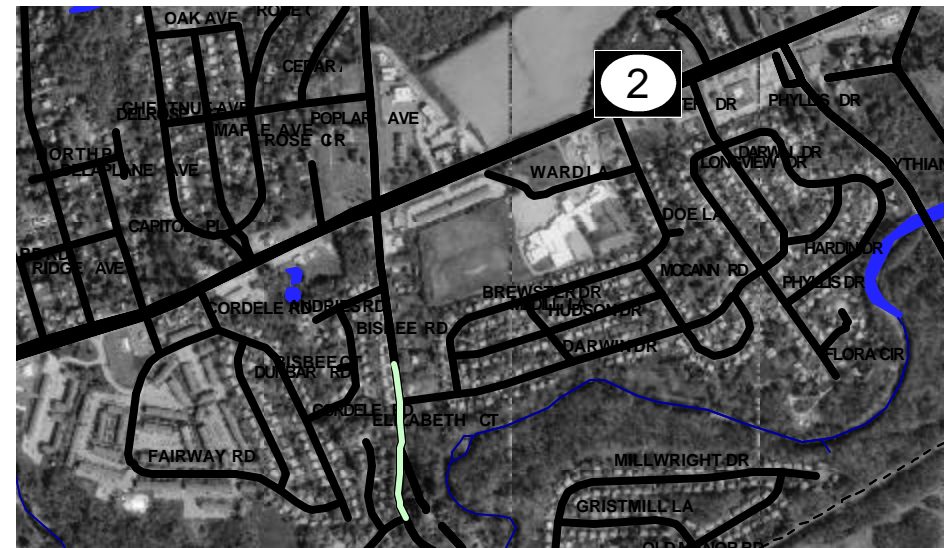
- **Areawide Sidewalks / Bus Stops**– This group of projects will add sidewalk segments throughout the Churchman's Crossing area in an effort to improve pedestrian connections between communities, businesses, schools, recreational destinations, and transit service. At signalized intersections, channelization islands, pedestrian ramps, crosswalks, and pedestrian signals will be added. These projects will also upgrade existing or add new bus stops throughout the Churchman's Crossing area in an effort to make transit more attractive and accessible to existing/potential users.



The adjacent map indicates the locations of sidewalk improvements along Kirkwood Highway and SR 7 currently in the design phase. Additional locations will be identified in the .



**Red Mill Road sidewalk** – This project will provide a new sidewalk connection along the west side of Red Mill Road between Mary Ella Drive and north of Darwin Drive, helping to link neighboring communities (Millrace, Sycamore Gardens, Admiral Club, and Red Mill Farms). This project will also add bike lanes through the project limits to better delineate Bike Route 1, and replace an existing bypass lane with a left turn lane into Mary Ella Drive from northbound Red Mill Road. To improve safety, the project will add physical medians to delineate safe travel paths, protect the left turn into Mary Ella, and improve the sight distance along Red Mill Road at the intersection of Mary Ella Drive.

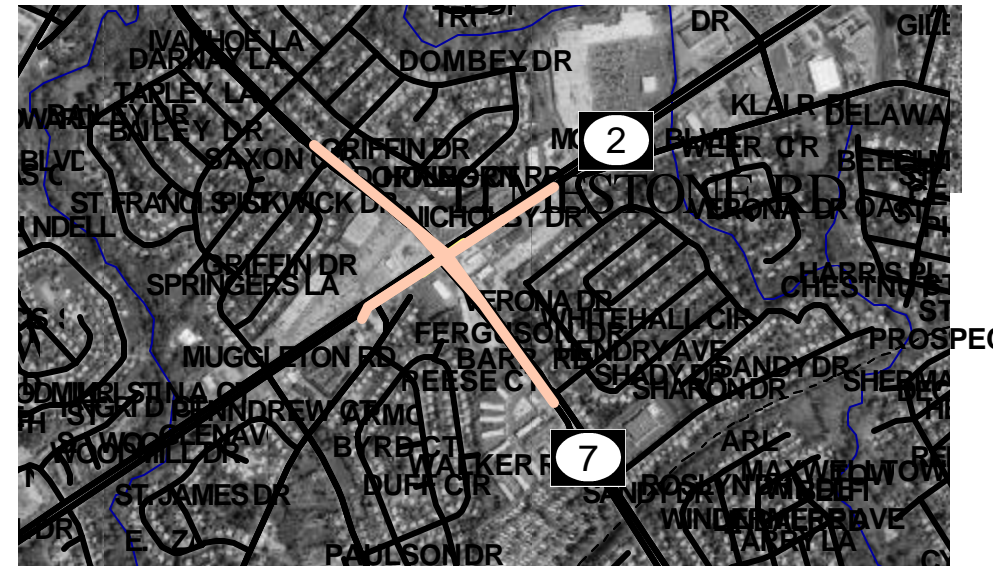


**CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)**

**Enhanced Transit Services** – Purchase vehicles to provide additional bus service, including shuttles throughout the area along with a ride share matching service; guaranteed ride home program; vanpool services, flexible work program transportation management coordination; provide timetables at bus stops; and work with local employees to promote compressed work week, staggered work hour, and preferential parking programs.

**Intersection Improvements:** The intersections listed below will be programmed for design and construction as conditions warrant, per the triggers recommended in the Churchman's Crossing Study. The funding shown is timed to be available when these intersections meet the triggers. Information from on-going traffic conditions monitoring will cause adjustments to be made.

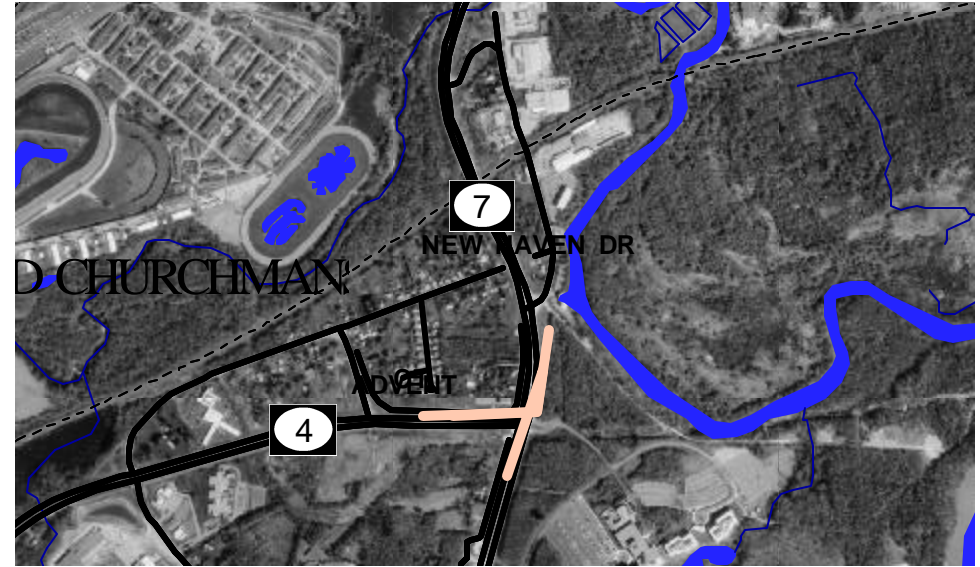
- **SR 2/SR 7** – This project will add an additional westbound SR 2 left turn lane to southbound SR 7 and an additional eastbound SR 2 left turn lane to northbound SR 7. The project will also add pedestrian and transit improvements by adding sidewalks on both sides of SR 2 from Griffin Drive to SR 7, enlarging channelization islands, adding pedestrian ramps, crosswalks, and pedestrian signals at the SR 2/SR 7 intersection, and upgrading four existing bus stops. This project will mill and overlay the existing pavement on SR 2 on both sides of the intersection as well as the existing pavement on SR 7 between SR 4 and Milltown Road.





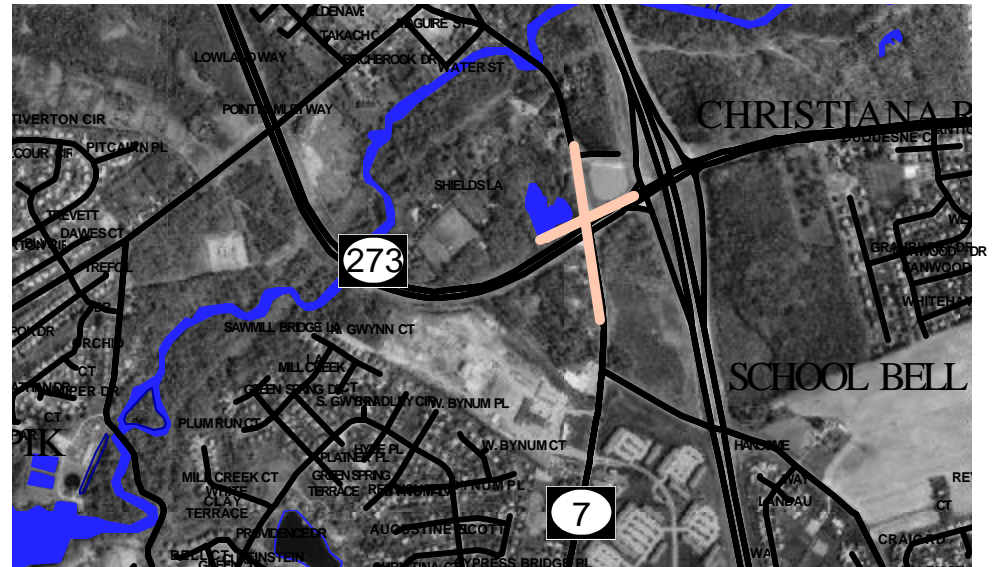
***CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)***

- **SR 4/SR 7 (Phase I)** – This project will add an additional westbound SR 4 through lane, and will increase the length of the southbound SR 7 left turn to eastbound SR 4 storage lane. The project will also add improved pedestrian and transit access by providing sidewalks on the west side of SR 7 to the school entrance and on the west side of Elm Street between eastbound and westbound SR 4, adding pedestrian ramps, crosswalks, and pedestrian signals at the SR 4/SR 7 intersection, and upgrading one existing bus stop.
- **SR 4/SR 7 Phase (II)** – A third left turn lane from eastbound SR 4 to northbound SR 7 may be required to accommodate approved development expansion (MBNA, Christiana Hospital, Center Pointe, and J.P. Morgan) in the SR 4 corridor, which has not occurred to date.



***CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)***

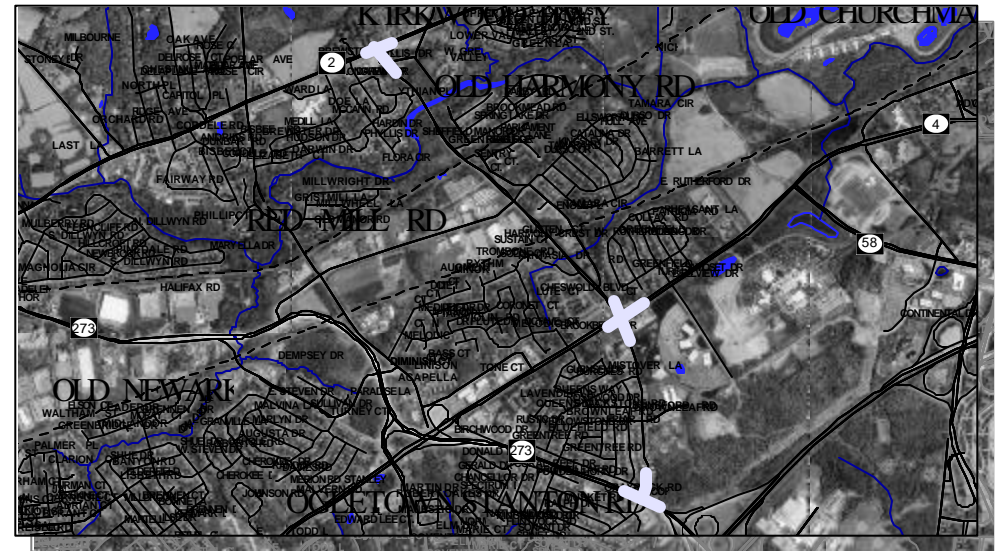
- **SR 7/SR273-** Additional left turn storage capacity for SR273 traffic turning onto SR 7.





**CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)****Harmony Road Intersections:**

- **SR273**
- **SR 2**
- **SR 4**



**SR 273/Harmony Road** – Safety improvements to be determined after monitoring traffic following the construction of Harmony Road traffic calming measures.



***CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)***

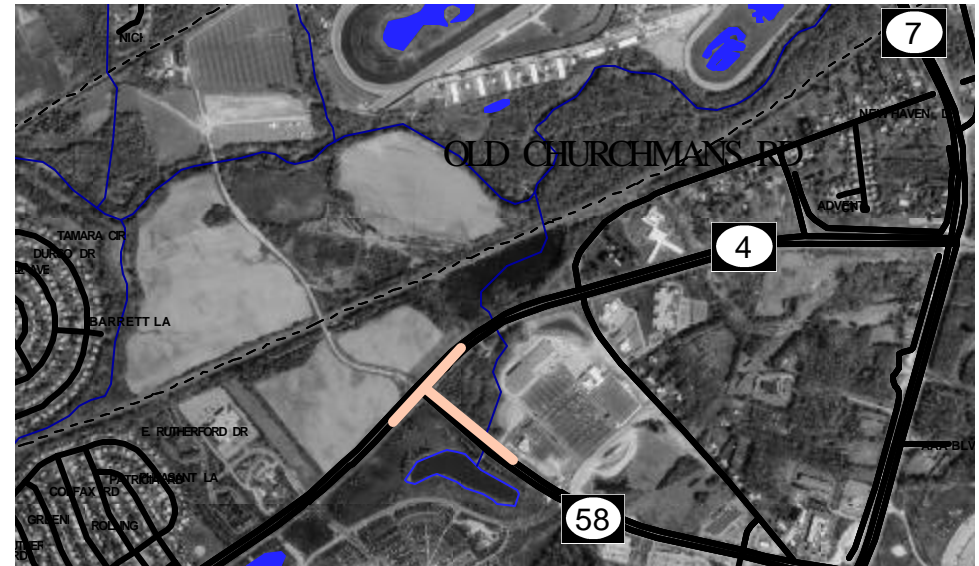
- **SR 2/Harmony Road** – Monitor traffic after the construction of Harmony Road traffic calming measures and determine need for improvements.
- **SR 4/Harmony Road** – Monitor traffic after the construction of Harmony Road traffic calming measures. Ultimate improvements along SR 4 at intersection would accommodate approved development expansion (MBNA, Christiana Hospital, Center Pointe, and J.P. Morgan) in the SR 4 corridor, which has not occurred to date, for the most part. Improvements may include one additional through lane in each direction on SR 4.





***CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)***

- **SR 4/Churchman's Road** – A third northbound left turn lane from Churchmans Road to westbound SR 4 may be required if Churchman's Road is not extended from SR 4 north to SR 2. If the Churchman's Road extension (included in the WILMAPCO Metropolitan Transportation Plan) is constructed, this intersection will need to be reconfigured.





***CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)***

- **SR273/Chapman Road** – Potential safety and capacity improvements. May not be required if Christiana Connector is constructed.



***CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)*****Roadway Improvements:**

- **Harmony Road traffic calming** – This project will construct traffic calming median and choker islands in three locations along Harmony Road between SR 273 and SR 4 in an attempt to reduce traffic volumes and vehicle speeds through the community. This project will also add pedestrian ramps at existing sidewalk locations; replace an existing landscaped median on Brownleaf Road; and add decorative community entrance lighting at this Brownleaf Road median. This project will mill and overlay the existing pavement on Harmony Road from SR 273 to just north of Rosewood Drive.





**CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)**

- **Ramp for Churchman's Road to I-95** – Northbound access to I-95 from Churchman's Road. This ramp will provide relief for traffic that accesses I-95 via a one lane loop ramp.

**PROJECT JUSTIFICATION:** These projects are the beginning of the implementation phase for the Churchman's Crossing Study.

**County:** New Castle  
**Municipality:**  
**Funding Program:** Road System - Arterial  
**Functional Category:** Management  
**Representative District:** 18, 19, 21  
**Senatorial District:** 9, 11

**Funding Information**

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
	267	491	8,093	8,752	8,960	11,700	38,263

*All \$ X 1,000*

**CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)**

FMB ID OR PROJECT #	INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
21-116-01	<i>Churchman's Crossing Imp's</i>		80% F – Q23	11,400	3,000		500	1,500	6,400
			100% ST	1,544	357	227	160	800	
	<i>Program Management</i>	DEV	100% ST	450		250	200		
	<i>Multi – Modal Improvements</i>								
20-116-02	• Area Sidewalks/Bus Stops	PE	100% ST	820	370	450			
		R/W	100% ST	580	80	500			
		C	80% F – Q23	5,966	1,166	1,800	3,000		
20-116-02	• Red Mill Road Sidewalk	PE	100% ST	45	45				
		R/W	100% ST	100		100			
		C	80% F – Q23	950		950			
20-111-02	• Enhance Transit Service	PRO	100% ST	450	450				
	<i>Intersections</i>								
	• SR 2/SR 7	PE	100% ST	165	165				
20-111-01		R/W	100% ST	20		20			
		C	80% F – Q23	1,780		1,780			
	• SR 4/SR 7 (Phase I)	R/W	100% ST	325		325			
20-041-01		C	80% F – Q24	960			960		
	• SR273/Harmony Road	PE	100% ST	140			140		
		C	80% F – Q24	700				700	
	• SR 2/Harmony Road	PE	100% ST	300			300		
		C	80% F – 33D	1,500				1,500	



**CHURCHMAN'S CROSSING IMPROVEMENTS (CONTINUED)**

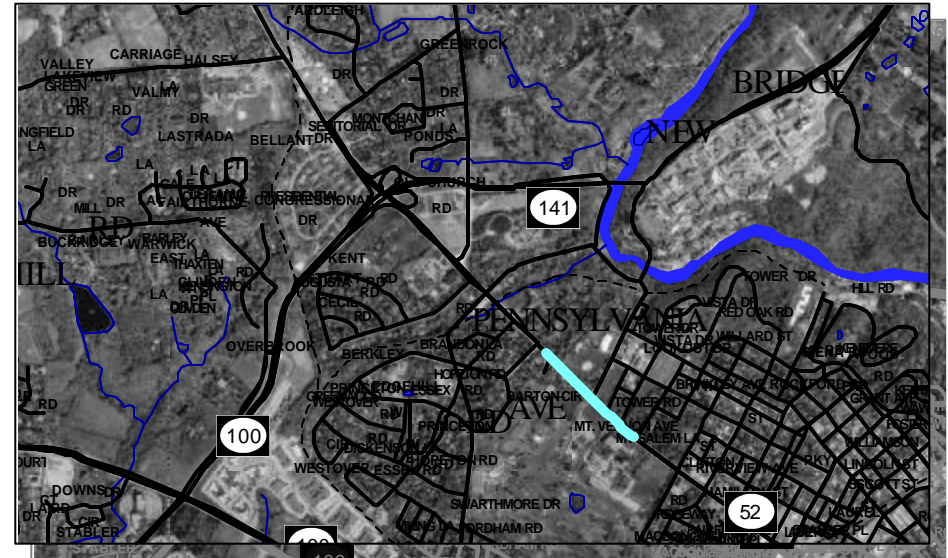
FMB ID OR PROJECT #	INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
21-111-01	• SR 4/Harmony Road	PE	100% ST	500			500		
		C	80% F	2,500					2,500
	• SR 4/SR 7 (Phase II)	PE	100% ST	300			300		
		C	80% F	1,500					1,500
	• SR 4/Churchman's Road	PE	100% ST	400			400		
		C*	80% F						
	• SR273/Chapman Road	PE	100% ST	400		400			
		C	80% F – Q24	2,000				2,000	
<i>Roadway Improvements</i>									
	• Harmony Rd Traffic Calming	PE	100% ST	60	60				
		C	80% F – Q24	600	600				
	• Churchman's Road Ramp to I-95	PE	100% ST	500		500			
		C	80% F – Q76	2,500			2,500		
<i>Other Areawide Improvements</i>									
	• Churchman's Road / SR 7	R/W	100% ST	<u>650</u>	<u>650</u>	_____	_____	_____	_____
			TOTAL	42,705	8,093	8,752	8,960	6,500	10,400

*All \$ X 1,000*

***KENNETT PIKE (SR 52), SOUTH OF SR141 TO PRESIDENTIAL DRIVE***

**PROJECT SCOPE/DESCRIPTION:** This project will provide landscaping from Presidential Drive southward over SR141 to SR100.

**PROJECT JUSTIFICATION:** To coordinate scenic roadway landscaping with construction.





***KENNETT PIKE (SR 52), SOUTH OF SR141 TO PRESIDENTIAL DRIVE (CONTINUED)***

**County:** New Castle  
**Municipality:**  
**Funding Program:** Road System – Arterial  
**Functional Category:** Management  
**Representative District:** 11, 12  
**Senatorial District:** 6

***Funding Information***

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
			300				300

***All \$ X 1,000***

FMB ID OR PROJ #	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
20-044-03	PE C	100% ST 100% ST  TOTAL	30 <u>270</u>  300	30 <u>270</u>  300				

***All \$ X 1,000***

## NEW CASTLE CITY IMPROVEMENTS, SR 9 AND 3<sup>RD</sup> STREET AND 6<sup>TH</sup> STREETS

**PROJECT SCOPE/DESCRIPTION:** The intersections of SR 9 at 3rd and 6th Streets will be reconfigured to create a more continuous alignment on SR 9. Currently, the alignment of these intersections directs through traffic onto residential, historical streets. Project will provide pedestrian crosswalks at both intersections and may signalize the SR 9 and 6th Street intersection, should traffic warrants be met.



**PROJECT JUSTIFICATION:** These intersection improvements were recommended in the *City of New Castle Transportation Plan*, adopted by WILMAPCO in January 2000. The improvements will address the problem of cut through traffic on residential streets by encouraging traffic to remain on SR 9. A traffic signal and crosswalks will improve connections between historic New Castle and surrounding commercial areas, schools, and housing.



<b>County:</b>	New Castle
<b>Municipality:</b>	New Castle
<b>Funding Program:</b>	Road System – Arterial
<b>Functional Category:</b>	Management
<b>Representative District:</b>	17
<b>Senatorial District:</b>	12



***NEW CASTLE CITY IMPROVEMENTS, SR 9 AND 3<sup>RD</sup> STREET AND 6<sup>TH</sup> STREET (CONTINUED)******Funding Information***

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
					280	2,800	3,080

***All \$ X 1,000***

FMB ID OR PROJ #	INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
	SR 9 & 3 <sup>RD</sup> Street	PE C	100% ST 80% F	100 800			100		800
	SR 9 & 6 <sup>TH</sup> Street	PE R/W C	100% ST 100% ST 80% F	180 200 <u>1,800</u>			180		200 <u>1,800</u>
			TOTAL	3,080			280		2,800

***All \$ X 1,000***



**PAVEMENT REHABILITATION – NEW CASTLE COUNTY**

**PROJECT SCOPE/DESCRIPTION:** As specific project scopes are developed, funds within this allocation are programmed accordingly. The roadways in New Castle County that are currently scheduled for major pavement rehabilitation are listed below:

- Library Avenue from Kensington Lane to SR273, Newark***

Remove and replace all existing concrete as the concrete is deteriorating due to the reaction of salt used during snow removal with the stone base of the concrete. This reaction is known as alkali silica reactivity (ASR).



- SR273 from Ogletown to I-95***

Resurfacing, intersection, and turn lane improvements to allow for easier movement through this corridor.



**PAVEMENT REHABILITATION – NEW CASTLE COUNTY (CONTINUED)**

- New Linden Hill Road from Polly Drummond Road to SR 7***

Rubbalize existing concrete pavement and overlay with 10" of hot-mix; reconstruction of the existing hot-mix shoulders and widen right turn lanes; improve bicycle/pedestrian facilities; and make drainage improvements.



**PAVEMENT REHABILITATION – NEW CASTLE COUNTY (CONTINUED)**

**County:** New Castle  
**Municipality:**  
**Funding Program:** Road System – Arterial  
**Functional Category:** Preservation  
**Representative District:** 14, 21, 22, 25  
**Senatorial District:** 8, 9, 10, 11



FMB ID OR PROJ #	INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
99-061-11	Library Ave., Kensington Lane Lane to SR273, Newark	PE C	100% ST 80% F – Q24	105 6,500	105	6,500			
	SR273, Ogletown to I-95	C	80% F – Q23	4,156			4,156		
99-044-03	New Linden Hill Rd. Polly Drummond Rd to SR 7	C	80% F – Q20	<u>4,788</u>	_____	<u>4,788</u>	_____		
			TOTAL	15,549	105	11,288	4,156		

*All \$ X 1,000*



**SR 41 (LANCASTER PIKE) NORTH OF VALLEY ROAD TO NORTH OF SCHOOLHOUSE ROAD**

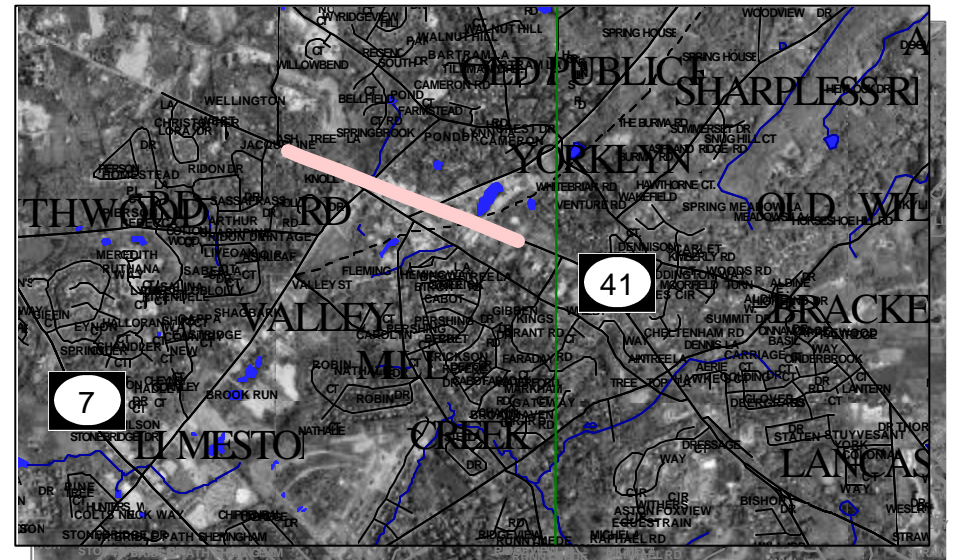
**PROJECT SCOPE/DESCRIPTION:** A community working group (CWG) comprised of civic leaders, business representatives, political leaders, and private citizens was formed in April 2000 to guide in the development of a recommended safety plan and address the need for improved aesthetics.

The proposed improvements include:

- Installation of a traffic signal at the SR 41/Lancaster Pike and Valley Road intersection to address angle accidents reported at the intersection. These accidents are caused by Valley Road motorists misjudging gaps in traffic on SR 41, due to speeding on the southbound downgrade approaching the center of town. The installation of a traffic signal will alternate the right-of-way for Valley Road and SR 41 motorists, reducing the likelihood of these types of accidents. Additionally, the traffic signal will accommodate Lancaster Pike left-turns for Valley Road and SR 41 motorists. This should reduce the congestion on Yorklyn Road and Old Lancaster Pike caused by the current diversion of left-turning vehicles destined for westbound Valley Road
- Conversion from four-way to two-way STOP control at the Old Lancaster Pike and Valley Road intersection to avoid operational conflicts with the proposed signalization at SR 41 and Valley Road.
- Conversion from two-way to one-way southbound travel on Old Lancaster Pike, north of the first residential driveway sound of SR 41 to prohibit motorists from using Old Lancaster Pike, north of Valley Road, to bypass the proposed traffic signal at SR 41 at Valley Road.
- The project will improve overall pedestrian access and circulation by providing sidewalks on both sides of SR 41 from Yorklyn Road to the Police Athletic Center (PAL) to Coffee Run Shopping Center and on both sides of Yorklyn Road, from SR 41 to Old Lancaster Pike. Additionally, pedestrian signalization and crosswalks will be provided on all four approaches of the SR 41/Yorklyn Road intersection and on three approaches to the SR 41/PAL Center intersection.

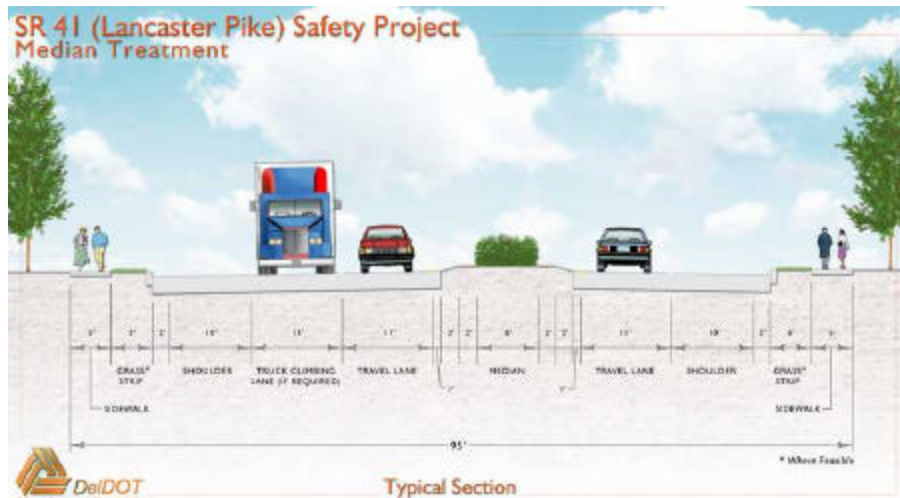
Bicycle traffic will be accommodated along the SR 41 corridor along a shared-use shoulder, which ranges in width from 8 to 12 feet. In the vicinity of a truck climbing lane along northbound SR 41 just north of Valley Road, the shoulder width is reduced to approximately 4 feet in order to avoid environmental impacts along the east side of the roadway. Special signing will be included to alert approaching motorists to this restricted shoulder area. At intersections with dedicated acceleration/deceleration lanes, a four-foot wide bike lane will be provided along the inside of the auxiliary lane.

Provisions for transit use, including concrete pads and pedestrian shelters, will be provided on the west side of SR 41 at the First Union Park and Ride lot.



***SR 41 (LANCASTER PIKE) NORTH OF VALLEY ROAD TO NORTH OF SCHOOLHOUSE ROAD (CONTINUED)***

**PROJECT JUSTIFICATION:** The Department's Highway Safety Improvement Program (HSIP) identified the need for safety improvements to correct recurring accident along SR 41/Lancaster Pike from North of Valley Road to north of Mitchell Road. A combination of closely spaced commercial driveways and a lack of left-turn lanes combine to create numerous conflict points for motorists entering and exiting SR 41. This is especially apparent at the approaches to the Yorklyn Road signalized intersection where queue lengths restrict sight distance for motorist's entering/exiting commercial driveways.



**SR 41 (LANCASTER PIKE) NORTH OF VALLEY ROAD TO NORTH OF SCHOOLHOUSE ROAD (CONTINUED)**

**County:** New Castle  
**Municipality:**  
**Funding Program:** Road System - Arterial  
**Functional Category:** Management  
**Representative District:** 20  
**Senatorial District:** 6

***Funding Information***

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
			375	565	180	5,400	6,395

***All \$ X 1,000***

FMB ID OR PROJ #	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	PHASE	FY 2001 7/00-6/01 TOTAL	FY 2002 7/01-6/02 TOTAL	FY 2003 7/02-6/03 TOTAL	FY 2004 7/03-6/04 TOTAL	FY 2005-2007 7/04-6/07 TOTAL
20-007-02	100% ST	125	LOC/ENV	125				
	100% ST	815	PE	250	565			
	100% ST	180	R/W			180		
	80% F – Q24	<u>5,400</u>	C	_____	_____	_____	<u>5,400</u>	
		6,395		375	565	180	5,400	

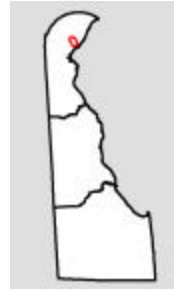
***All \$ X 1,000***



***SR141 BASIN RD, SR273 (FRENCHTOWN ROAD) TO BURNSIDE BOULEVARD***

**PROJECT SCOPE/DESCRIPTION:** This concrete roadway is deteriorating due to the presence of an alkali silica reaction (ASR) found in the concrete itself.

- BR680 will include the replacement of the superstructure and rehabilitation of the substructure. Additional clearance will be gained by using high performance steel girders and fiber reinforced plastic deck panels with a high performance concrete overlay.
- Pavement rehabilitation from SR273 to Burnside Boulevard will include reconstruction of pavement with shoulders and sidewalks. and will be completed in two separate phases, SR273 to Jay Drive and from Jay Drive to Burnside Boulevard.
- Safety improvements in the areas of SR141 North of US 13 to US 13, including Washington Avenue, will include the extension of Washington Avenue to SR141 as well as closures to Pennsylvania and Delaware Avenue at SR141 and Washington Avenue at US 13.



**PROJECT JUSTIFICATION:** To alleviate the deterioration of concrete associated with the ASR problem.



**SR141 BASIN RD, SR273 (FRENCHTOWN ROAD) TO BURNSIDE BOULEVARD (CONTNUED)**

**County:** New Castle  
**Municipality:**  
**Funding Category:** Road System – Arterial  
**Functional Category:** Preservation  
**Representative District:** 15,17,19  
**Senatorial District:** 9,12,13

***Funding Information***

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
7	31	111	725	455	16,549	15,500	33,378

***All \$ X 1,000***

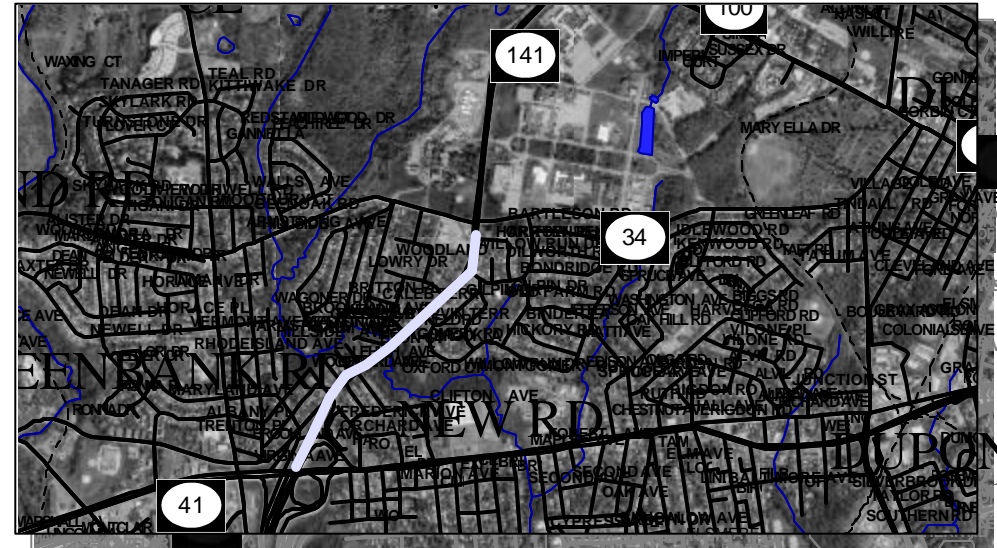
FMB ID OR PROJ #	INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
99-071-10	BR680, US 13 and SR 141	R/W C	100% ST 80% F – Q10	150 3,375	150		3,375		
	Pavement Reconstruction								
	• SR273 to Jay Drive	C	80% F – Q28	12,427			12,427		
	• Jay Drive to Burnside Blvd	PE C	100% ST 80% F – Q01	575 15,500	575			15,500	
99-007-01	SR141, North of US 13 Delaware Avenue to US 13 (Jay Dr.)	R/W C	100% ST 90% F – Q21	455 <u>927</u>		455	<u>927</u>		
	TOTAL			33,409	725	455	16,729	15,500	

***All \$ X 1,000***

**SR141, KIRKWOOD HIGHWAY TO FAULKLAND ROAD (SR 34), SAFETY**

**PROJECT SCOPE/DESCRIPTION:** Planned improvements include conversion of the existing four-lane arterial (without shoulders) to a four-lane divided arterial with an 18' raised median; two 24' roadways; 10' outside shoulders; and 5' sidewalks.

**PROJECT JUSTIFICATION:** This project was identified by the Department's Project Development Committee (PDC) through the Highway Safety Program.





***SR141, KIRKWOOD HIGHWAY TO FAULKLAND ROAD (SR 34), SAFETY (CONTINUED)***

**County:** New Castle  
**Municipality:**  
**Funding Program:** Road System – Arterial  
**Functional Category:** Management  
**Representative District:** 12, 13  
**Senatorial District:** 7

***Funding Information***

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
				1,507		11,209	11,209

***All \$ X 1,000***

FMB ID OR PROJ #	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
	LOC/ENV PE R/W C	100% ST 100%ST 100%ST 80% F	305 1,200 3,005 <u>8,204</u>		305 1,200			3,005 8,204
		TOTAL	12,714		<u>1,505</u>			<u>11,209</u>

***All \$ X 1,000***

***SR141 / US202 AREA IMPROVEMENTS***

On April 29, 1999 the State of Delaware announced a signature proposal that would bring the world's third largest pharmaceutical company's U.S. headquarters to the Brandywine Hundred area. Delaware's proposal to AstraZeneca was accepted, launching a first-of-its kind link between business site selection, land preservation, recreational opportunity, transportation improvements, and historic restoration. AstraZeneca and the State of Delaware joined with local officials and communities to develop a master plan for this area known as the Blue Ball Properties Project.

**The Blue Ball Properties Project**

The project consists of approximately 232 acres of land North of Wilmington in an area known as the Brandywine Hundred. Bisected by US 202 and bounded on the south by Interstate 95, this Master Plan offers over 152 acres of needed community improvements and economic development. Woodland areas and new recreational parks will all be accessible via the Northern Delaware Greenway. Transportation and infrastructure improvements will separate local and regional traffic, allowing for safe and efficient travel in the area. The much needed repair and enhancements of the degraded natural environment will bring new life to deteriorated streams and wetland areas. Historic restorations and rehabilitations to existing structures will allow for adaptive reuse. This new Master Plan combines recreational, transportation, environmental, and historic improvements with substantial economic development, offered by AstraZeneca, to create a true gateway to the Brandywine Hundred Community.

**Constructing the Gateway**

The construction of the gateway can be understood as five integral elements - recreation, transportation, environment, historic restoration, and economic development.

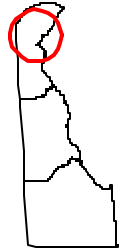
**Recreation**

Recreation elements and park trails will be implemented throughout the project in both the West and East Park. Construction of new park trails in the gateway will link Bellevue State Park, Bringham Woods, and Rockwood Museum with Brandywine Park and the City of Wilmington. East Park open play areas and multi-use playing fields will be constructed, to help address the community's recreation needs.



***SR141 / US202 AREA IMPROVEMENTS (CONTINUED)*****Transportation**

Transportation improvements will be implemented throughout the project, beginning with infrastructure and transit services. Traffic signal communication fiber, cameras and other DelTRAC infrastructure will be installed, completing the communication links and monitoring for the area. Transit service improvements will include the initiation of services along US 202 into Pennsylvania as well as the establishment of a new transit center at AstraZeneca. Road construction will begin on the west side of the project. A temporary six-lane road will be constructed to divert traffic from a section of US 202 that needs upgrade and repair. Rockland Road will be temporarily closed at this time and will not reopen until the new West park drive is converted to its planned two-lane roadway design. Traffic will be diverted to the temporary West Park Drive once a new connector road between US Route 202 and Foulk Road is in place. This will allow for more efficient and safe construction of two new overpass / bridge structures. These new structures are essential in helping to separate local and regional traffic in the gateway and to allow for bike path and pedestrian connections. With this critical section of US 202 complete, West Park Drive will be reduced to its planned two-lane design and all other East Park Roadways will be constructed. The creation of a new Spur Road from SR141 and additional road widening and landscape improvements to sections of US 202 will complete the transportation elements of the gateway.

**Environment**

Environmental restoration and improvements will first occur in the West Park with the restoration of neglected portions of Alapocas Run. These restorations will breathe new life into deteriorated wetland areas. Signature landscaping, consistent with the heritage of Delaware and the Brandywine Hundred community, will bring park goers through over 152 acres of natural environment in both the East and West Parks. A new water quality basin will be located in the East Park and will be integrated with Matson Run. This new basin will provide local environmental education opportunities while offering a habitat for wildlife.

**Historic Restoration**

Historic restoration will occur at many locations throughout the project. The Blue Ball Dairy Barn, in the West Park, will be the main focus of the planned historic restorations to be completed as part of this project. The Dairy Barn is an architecturally unique structure with a strong presence on US 202 and will be restored for adaptive re-use. Other planned improvements will include the rehabilitation of the Bird Husband House and the Murphy House along with the stabilization of the existing Weldin Plantation ruins. These four elements in conjunction with major private investment and economic development from AstraZeneca will be in place by the end of 2007 and the gateway will be complete.

**Conclusion**

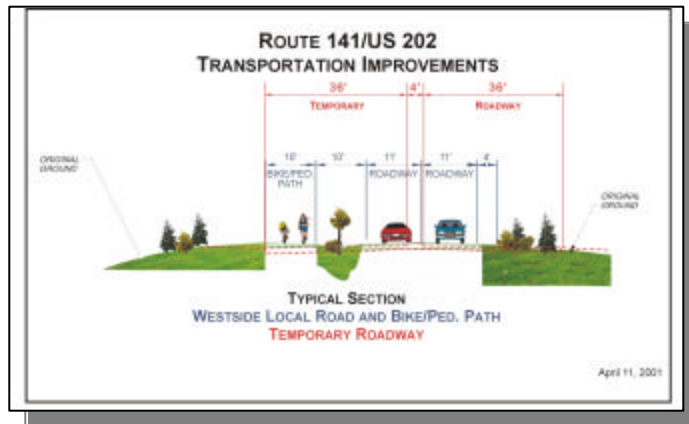
This is an exciting and unique time for the Brandywine Hundred; one that will help to shape the of this historic community. Through community input, economic development and sensitive design, the State of Delaware continues its commitment to the environment and quality of life in the state. Continued public support and community involvement remain at the forefront of this project's success as we continue towards the creation of a true "Gateway to the Brandywine".



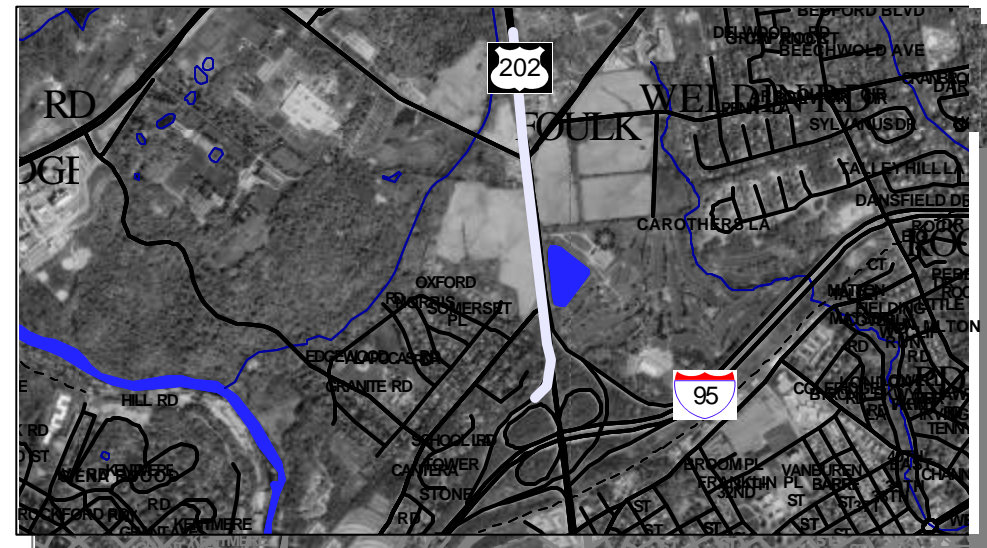
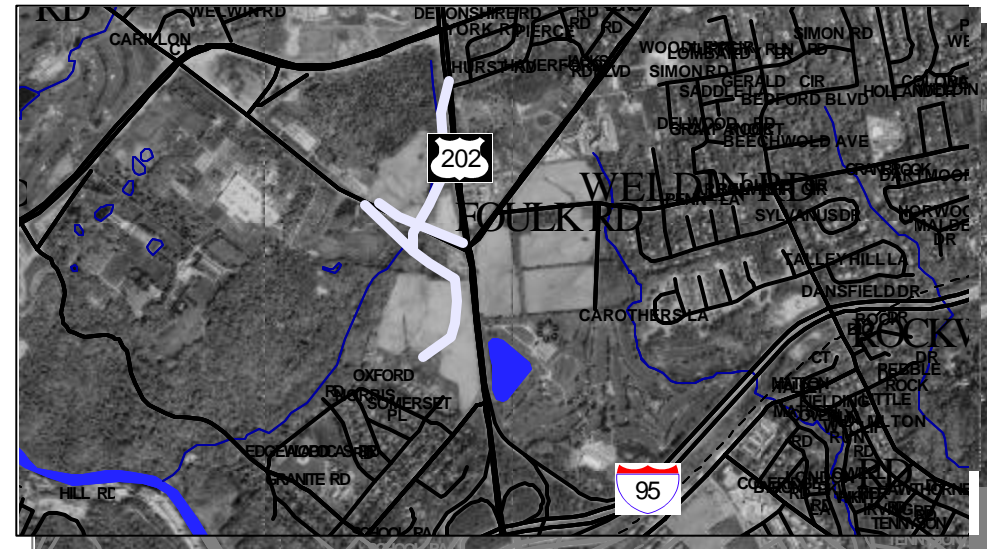
**SR141 / US202 AREA IMPROVEMENTS (CONTINUED)**

**PROJECT SCOPE/DESCRIPTION:** The SR141 / US202 work program will include stormwater management (SWM) throughout the area.

- A. West Side Roads – Includes new West Park Drive, relocation of Rockland Road, West Side Park greenways, stormwater management, and stream relocation. An example of a typical section of the roadway is pictured below.

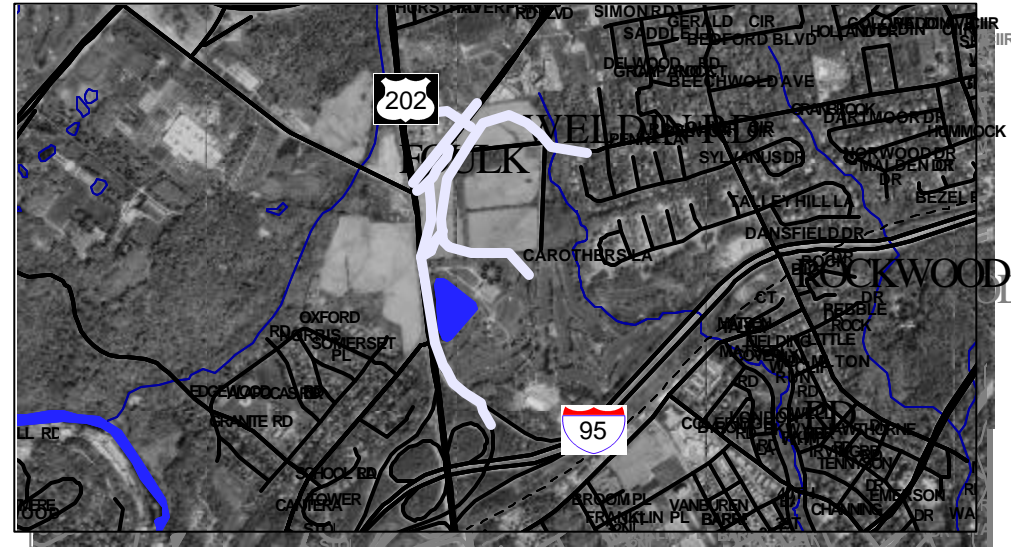
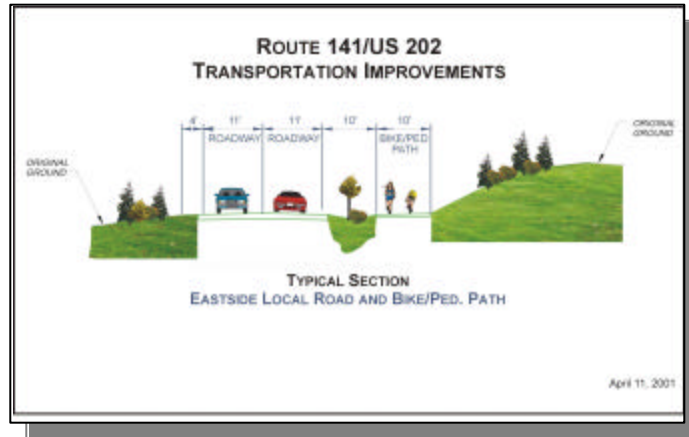


- B. US202 – US202, Augustine cutoff to Independence Mall – improvements on US202 including two new underpasses at Foulk Road and the new East Park Drive.
- C. Utility Relocations – Development of a utility corridor to relocate utilities from US202 to West Side Park Drive.



**SR141 / US202 AREA IMPROVEMENTS (CONTINUED)**

- D. East Side Roads – Includes a new East Park Drive, relocation of Weldin Road, and East Side Park greenways.



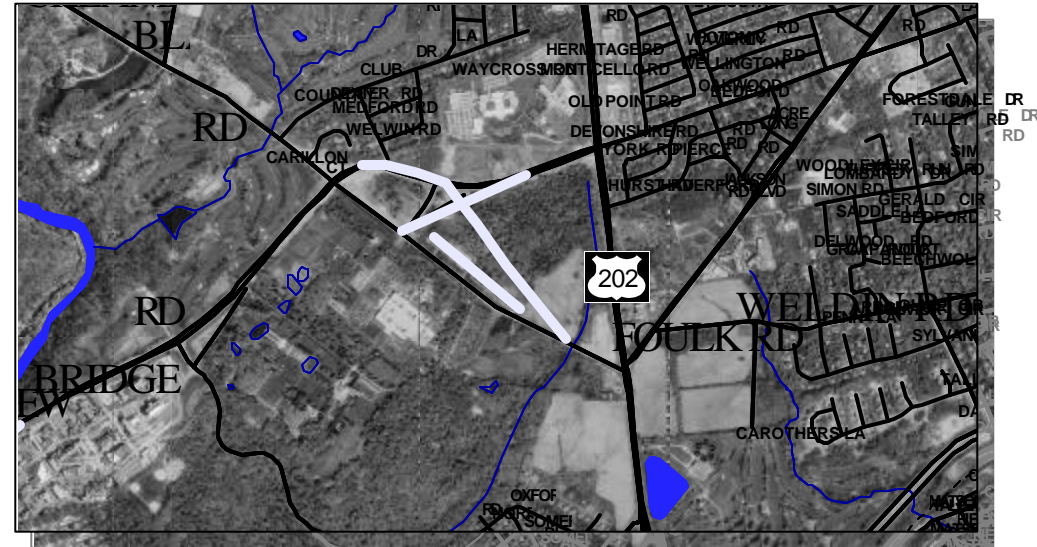
- E. US202, Independence Mall to North of Powder Mill Road – Improvements on US202, including additional turn lanes at the US202/Powder Mill Road intersection.





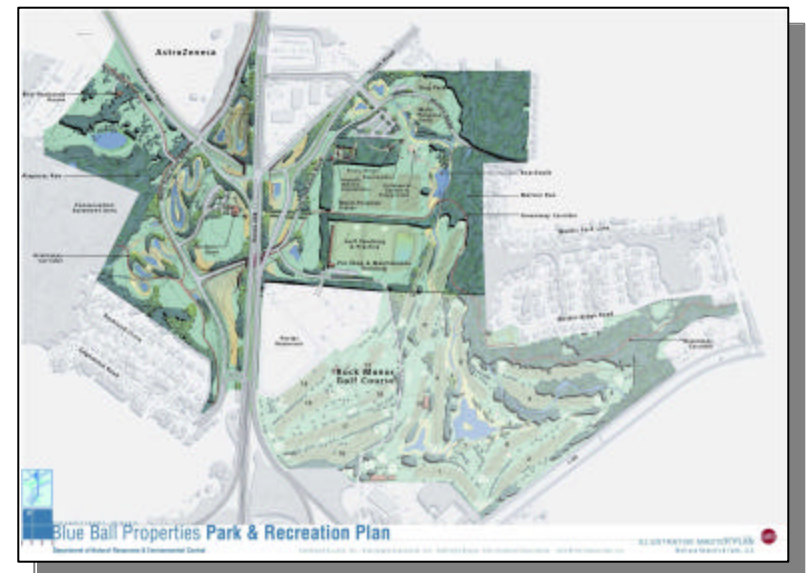
**SR141 / US202 AREA IMPROVEMENTS (CONTINUED)**

- F. SR141 Spur – Construction of a new road to connect SR141 and US202 to Foulk Road and realignment of the SR141 / Children's Drive intersection.



- G. The Parks and Recreation element of the improvements will include:

- Restoration of the Blue Ball Dairy Barn located to the southwest of the intersection of US202 and Rockland Road.
- Construction of a portion of the Northern Delaware greenway through the Blue Ball properties which will link the City of Wilmington at the Brandywine River.





***SR141 / US202 AREA IMPROVEMENTS (CONTINUED)***

**County:** New Castle  
**Municipality:**  
**Funding Program:** Road System - Arterial  
**Functional Category:** Expansion  
**Representative District:** 4, 6, 11  
**Senatorial District:** 1, 4

***Funding Information***

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
			16,243	24,441	23,283	38,362	102,330

*All \$ X 1,000*

**SR141 / US202 AREA IMPROVEMENTS (CONTINUED)**

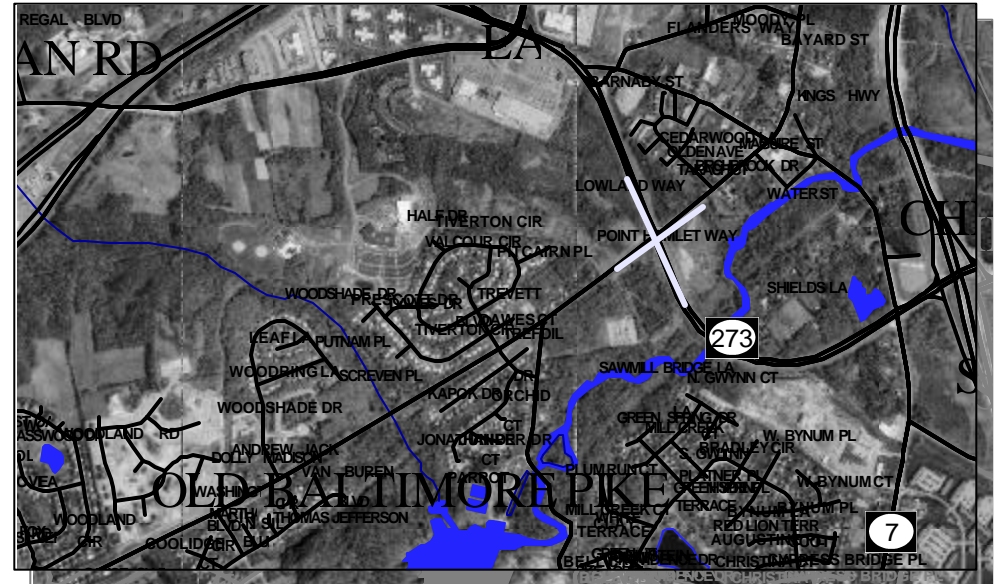
INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST. COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01	FY 2002 7/01-6/02	FY 2003 7/02-6/03	FY 2004 7/03-6/04	FY 2005-2007 7/04-6/07
• Stormwater Management (All projects)	PE	100% ST	500	500				
	C	100% ST	5,000		5,000			
• Development and Preliminary Engineering (All projects)	PE	100% ST	8,423	8,423				
A. West Side Roads	C	100% ST	13,029		13,029			
B. US202, Augustine Cutoff to Independence Mall	R/W	100% ST	1,900		1,900			
	C	80% A/C F – Q05	21,975			23,178		
C. Utility Relocations	R/W	100% ST	50		50			
	C	100% ST	3,500		3,500			
D. East Side Roads	R/W	100% ST	100			105		
	C	80% F – Q05	13,067				14,154	
E. US202, Independence Mall to North of Powder Mill Road	R/W	100% ST	500				542	
	C	100% ST	11,654					12,965
F. SR141, Spur Road	PE	100% ST	962		962			
	C	80% F	9,620					10,702
G. Parks and Recreation Elements								
• Historic Preservation – Blue Ball Barn Building	HIST	100% ST	4,492	4,492				
• Greenway	PE/C	100% ST	<u>828</u>	<u>828</u>	_____	_____	_____	_____
		TOTAL	100,330	14,243	24,441	23,283	14,696	23,667

***SR273 AND OLD BALTIMORE PIKE, CHRISTIANA CONNECTOR***

**PROJECT SCOPE/DESCRIPTION:** The project will include the construction of a two-lane road from the intersection of Lido Drive and Old Baltimore Pike to the intersection of Main St. and SR273. The purpose of the road is to provide opportunities for economic growth in the form of the Christiana Corners and Kinder Care developments, as well as future opportunities for the Commonwealth Trust Co. property owners

**PROJECT JUSTIFICATION:** The project will be funded by DelDOT. A private-public agreement will be developed to enable us to be reimbursed by the developers benefiting from the project. The project was originally referenced in the 1997 Churchman's Crossing Study as the Christiana Bypass.

<b>County:</b>	New Castle
<b>Municipality:</b>	
<b>Funding Category:</b>	Road System - Arterial
<b>Functional Category:</b>	Expansion
<b>Representative District:</b>	18
<b>Senatorial District:</b>	11





**SR273 AND OLD BALTIMORE PIKE, CHRISTIANA CONNECTOR (CONTINUED)**

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
				1,260			1,260

*All \$ X 1,000*

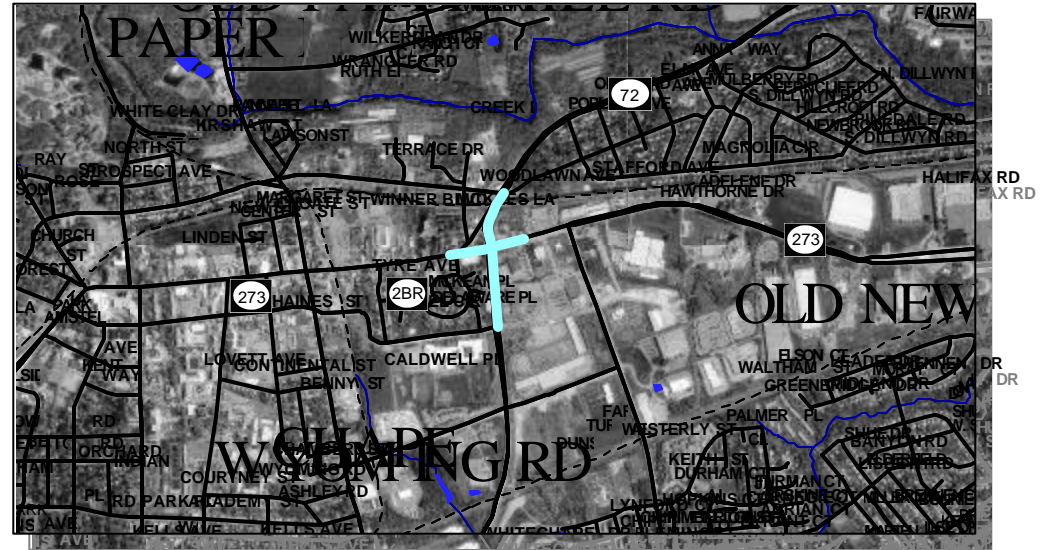
FMB ID OR PROJ #	FUNDING	PHASE	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
	100% State Others	PE/C C	1,260		1,260			
	TOTAL		1,260		1,260			

*All \$ X 1,000*

**SR273, SR 72, SR 2, NEWARK INTERSECTION IMPROVEMENTS, SAFETY**

**PROJECT SCOPE/DESCRIPTION:** Planned improvements include reducing the pavement width on Old Capitol Trail and on Main Street between SR 72 and Washington Street, sidewalk reconstruction; crosswalks; and transit work, including placement of a bus shelter.

**PROJECT JUSTIFICATION:** This project was identified through the Highway Safety Improvement Program.



***SR273, SR 72, SR 2, NEWARK INTERSECTION IMPROVEMENTS, SAFETY (CONTINUED)***

**County:** New Castle  
**Municipality:** Newark  
**Funding Program:** Road System – Arterial  
**Functional Category:** Management  
**Representative District:** 11  
**Senatorial District:** 4, 6

***Funding Information***

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
53	54	50	93	899			1,149

***All \$ X 1,000***

FMB ID OR PROJ #	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	PHASE	FY 2001 7/00-6/01  TOTAL	FY 2002 7/01-6/02  TOTAL	FY 2003 7/02-6/03  TOTAL	FY 2004 7/03-6/04  TOTAL	FY 2005-2007 7/04-6/07  TOTAL
98-007-03	100% ST 100% ST 90% F – Q21  TOTAL	93 40 <u>859</u>  992	R/W LANSC C	93 40 <u>859</u>  992				

***All \$ X 1,000***



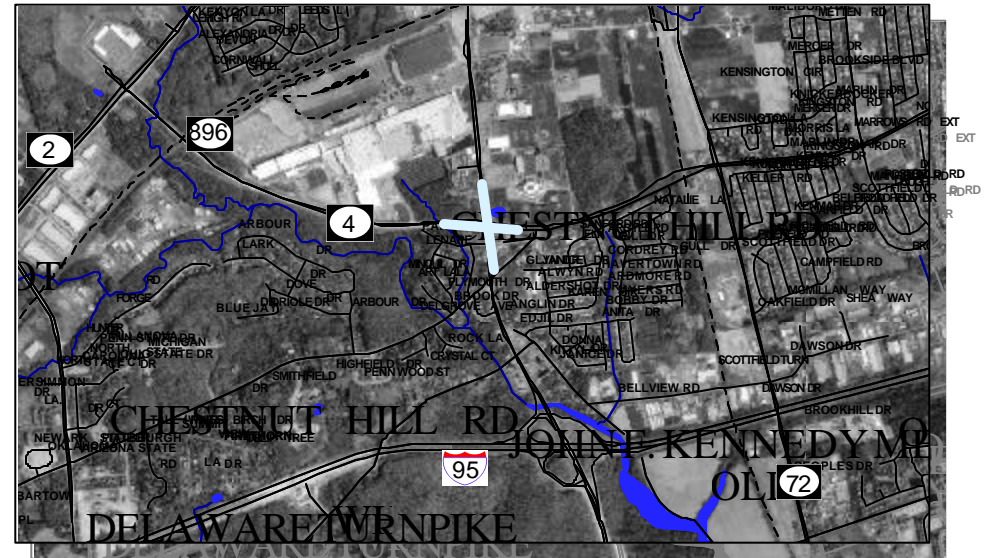
**SR896 AND SR 4 INTERSECTION IMPROVEMENTS, NEWARK**

**PROJECT SCOPE/DESCRIPTION:** Planned improvements include the channelization of traffic and restriping for additional/longer left turning lanes at this major intersection.

**PROJECT JUSTIFICATION:** This project was identified through the Department's Project Development Committee for inclusion in the CIP.



<b>County:</b>	New Castle
<b>Municipality:</b>	Newark
<b>Funding Program:</b>	Road System – Arterial
<b>Functional Category:</b>	Management
<b>Representative District:</b>	11
<b>Senatorial District:</b>	4, 6



**SR896 AND SR 4 INTERSECTION IMPROVEMENTS, NEWARK (CONTINUED)*****Funding Information***

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
				32			32

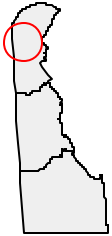
***All \$ X 1,000***

FMB ID OR PROJ #	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	PHASE	FY 2001 7/00-6/01	FY 2002 7/01-6/02	FY 2003 7/02-6/03	FY 2004 7/03-6/04	FY 2005-2007 7/04-6/07
				TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
21-042-02	100% ST	32	PE/C	32				

***All \$ X 1,000***

***US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS***

**PROJECT SCOPE:** This project seeks to implement the recommendations of the Route 40 Steering Committee, a public group that has recommended transportation improvements for the next twenty years, to address planned growth and enhance the quality of life in the Route 40 Corridor. The Committee's recommendations are found in The Route 40 Corridor 20-Year Transportation Plan dated June 19, 2000.



The projects listed below represent the first phase of improvements included within the Plan. These projects will be closely tied to an ongoing travel monitoring program through the Route 40 Corridor Monitoring Committee (CMC), which has been charged to implement the recommendations of the Plan. Triggered projects will not be constructed until changing conditions dictate in order to avoid creating excess capacity and inducing additional development and traffic in the corridor. Conceptual Engineering and Environmental Documentation of large projects proposed for later phases are also beginning in FY 2001 to facilitate implementation in the later years of the program and preserve needed right of way.

***Intersection Improvements***

- A. US 40/Walther Road (Short Term) – Addition of a southbound right turn lanes on Walther Road to address existing stacking problems. The improvements will also include pedestrian signals across US 40 at the intersection.





**US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)**

- B. US 40/Governors Square/Glendale Connector – Improvements at the intersection to provide southbound double left turn lanes, and one right turn lane, plus northbound double left turn lanes, one through lane, and right turn lane. This improvement is tied to Eden Square Connector needs.



- C. US 40/SR 72 – Addition of northbound and southbound through lanes. Also includes eastbound and westbound left turn lanes to provide double lefts at all legs of the intersection. Design for the project will not begin until the completion of the environmental assessment for the major capacity improvements along US 40.



**US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)**

- D. SR 72/ Del Laws Road – Realignment of the intersection to align with the proposed entrance to the Rickey Commerce Center. This project will be triggered with the construction of the Rickey Commerce Center.



### *Roadway Improvements*

- E. Church Road, US 40 to Queensbury Village I - Improvements will include two travel lanes, bike lanes, sidewalks, and railroad crossing devices. Improvements to the intersection of Church Road and US 40 will provide additional turn lanes and pedestrian signals, as well as additional lighting. This project includes private developer contributions.



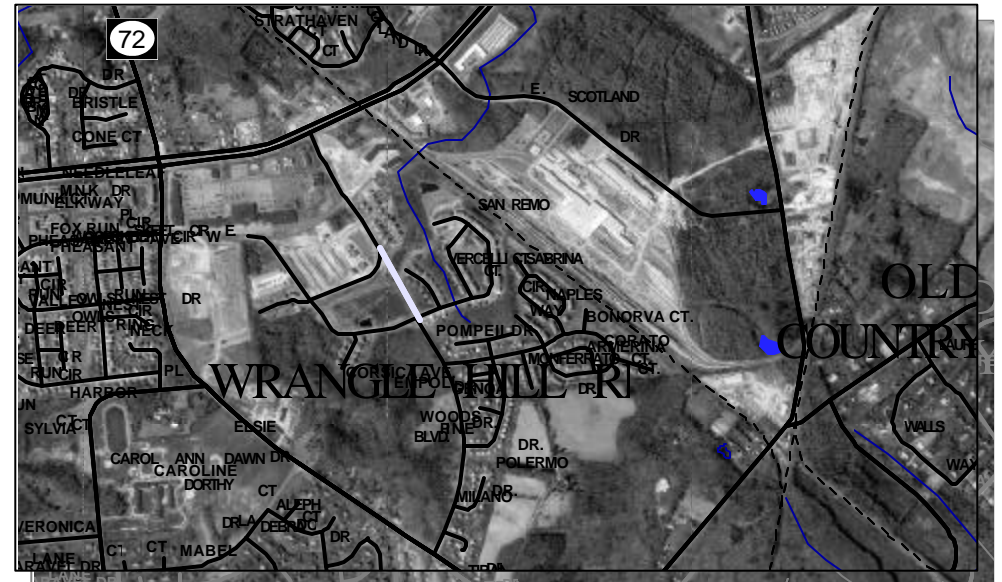


***US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)******New Roadways***

- F. Eden Square Connector – Construct road from SR 7, south of US 40, to the Eden Square Shopping Center to relieve congestion at the US 40/SR 7 area and improve accessibility. Also includes bicycle lanes and pedestrian facilities. The overall length of the new roadway is 0.23 miles.



- G. Rue Madora Drive – Connection to two existing sections of Rue Madora Drive behind the Fox Run Shopping Center to improve local mobility. Also includes construction of sidewalks. The overall length of the new roadway is 0.13 miles.





***US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)***

***Bicycle/Pedestrian Improvements-*** Sidewalks, crosswalks, minor intersection improvements and signal modifications to address existing transportation problems at various locations throughout the US 40 Corridor. Specific locations and plans include:

- H. Songsmith Drive Sidewalks, McMullen Circle to Smalleys Dam Road. – Construction of sidewalks on both sides of Songsmith Drive for 0.64 miles. Also includes crosswalks at select locations and bus stop improvements.  
Waterford Pedestrian Access – ADA - accessible access to the bus stop on US40 from Waterford I to include a ramp system over the berm, lighting, and other security features.
- I. US 40 Sidepaths, Church Rd to SR1 – 10 foot wide combined pedestrian/bicycle paths along both sides of Route 40 – A 10 foot wide combined pedestrian/bicycle path along both sides of US 40 will be constructed to improve pedestrian and bicycle mobility and safety, for a length of about 1.8 miles. Design will not begin until completion of the Environmental Assessment for major capacity improvements along US 40.
- J. US 40 Sidepaths, Salem Church Rd to Church Road – A 10 foot wide combined pedestrian/bicycle path along both sides of US 40 will be constructed to improve pedestrian and bicycle mobility and safety, for a length of about 0.63 miles. Design will not begin until completion of the Environmental Assessment for major capacity improvements along US 40.
- K. Wilton Blvd and Appleby Road Sidewalks – Construction of sidewalks along Wilton Boulevard and Appleby Roads. This project may include crosswalks and bus stop improvements.
- L. US 40 Sidepaths, SR72 to Salem Church Road – A 10 foot wide combined pedestrian/bicycle paths will be constructed along both sides of Route 40 – A 10 foot wide combined pedestrian/bicycle path along both sides of US 40 will be constructed to improve pedestrian and bicycle mobility and safety, for a length of about 1.37 miles. Design will not begin until completion of the Environmental Assessment for major capacity improvements along US 40.
- M. Old Baltimore Pike Sidepath, SR72 to SR273 – A 10' foot wide combined pedestrian/bicycle path along one side of Old Baltimore Pike, for a length of about 3.83 miles. Design will not begin until completion of the Old Baltimore Pike Planning Study.
- N. SR 72 Sidewalks, US40 to SR71 – Sidewalks will be constructed along both sides of SR 72 for about 2.41 miles. Design will not begin until completion of the SR 72 Planning Study.
- O. Walther Road Sidewalks, Old Baltimore Pike to US 40 – Construction of sidewalks and bike lanes along Walther Road, for a length of about 1.91 miles. This project will require reconstruction of a section of Walther Road near US 40 to bring it up to state standards (similar to Salem Church Road and Porter Road).

***Transit Service Enhancements –***

- P. Additional Pedestrian Connection to Bus Stops – Sidewalk connections to bus stops throughout the US 40 corridor. Specific locations and improvements related to these bus stops remain to be determined.

***US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)***

- Q. Additional Bus Stop Improvements – Additional bus shelters at selected locations throughout the corridor. Specific locations and improvements remain unidentified at this time.
- R. Park and Ride Preservation/Expansion – Preservation of existing lots in the corridor (People’s Plaza and SR7/SR273) and consideration of new ones (near both the SR 72/US 40 and US 40/SR 7 areas).
- S. Route Deviation Service – Funding of a pilot project for route deviation transit services as an extension of an neighborhood transit services program.

***Other Improvements***

- T. US 40 Signing and Streetscape Master Plan – Enhanced signage and streetscaping in the corridor. Construction of signage is scheduled for FY2002. Implementation of streetscaping scheduled for FY2005-2007
- U. Access Management on Developing Properties – Coordination with New Castle County’s land development process to reduce the number of new access points on Route 40.
- V. US 40 Streetscaping – Implementation of Streetscape Master Plan.

**US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)****PROJECT JUSTIFICATION:**

**County:** New Castle  
**Municipality:**  
**Funding Category:** Road System – Arterial  
**Functional Category:** Management  
**Representative District:** 15, 17, 24, 26, 27  
**Senatorial District:** 10, 11, 12, 13, 14

**Funding Information**

Prior Expenditures FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005-2007	Total
			5,613	8,872	10,041	20,881	45,407

*All \$ X 1,000*

INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01 TOTAL	FY 2002 7/01-6/02 TOTAL	FY 2003 7/02-6/03 TOTAL	FY 2004 7/03-6/04 TOTAL	FY 2005-2007 7/04-6/07 TOTAL
US 40 Development & Prelim Eng.	PE	80% F – Q23	4,165	2,250				1,915
	PE	100% ST	6,703		3,502	1,916	1,285	
US 40 Right of Way	R/W	100% ST	14,020	2,157	233	4,475	6,065	1,090
<b>Intersections</b>								
A. US 40 / Walther Rd (Short Term)	PE	100% ST	68	68				
	C	80% F – Q20	304		304			
B. US 40/Gov Sq. Glendale Conn.	PE	100% ST	77	77				
	C	80% F – Q24	516			516		
C. US 40/ SR 72	C	80% F	862					862



**US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)**

INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01 TOTAL	FY 2002 7/01-6/02 TOTAL	FY 2003 7/02-6/03 TOTAL	FY 2004 7/03-6/04 TOTAL	FY 2005-2007 7/04-6/07 TOTAL
D. SR 72 / Del Laws Road	C	80% F	552					552
<b>Roadway Improvements</b>								
E. (20-119-01) Church Rd, US 40 to Queensbury Village	C	80% F – Q23	4,463		4,463			
<b>New Roadways</b>								
F. (98-119-02) Eden Square Connector	PE C	80% F – Q23 Other/F – Q23	203 1,350	203		1,350		
G. Rue Madora	PE C	100% ST 80% F – Q24	50 334	50		334		
<b>Bicycle/Pedestrian Improvements</b>								
H. (22-119-02) Songsmith Drive Sidewalks And Waterford Pedestrian Access	PE R/W C	80% F – Q21 100% ST 80% F – Q21	150 80 634	150	80	634		
I. Sidepaths, Church Rd to SR1	C	80% F – Q24	2,623				2,623	
J. Sidepaths, Salem Church to Church Rd.	C	80% F – Q24	895				895	
K. Wilton Blvd./Appleby Rd. Sidewalks	C	80% F – Q24	1,733				1,733	
L. Sidepaths, SR 72 to Salem Church Rd.	C	80% F	1,887					1,887
M. Sidepaths, Old Balt Pike, SR 72 to SR273	PE C	80% F – Q24 80% F	392 2,613	392				2,613
N. SR 72 Sidewalks, US 40 to SR 71	C	80% F	3,157					3,157
O. Walther Rd Sidewalks, OBP to US 40	C	80% F	1,635					1,635

**US 40, MARYLAND LINE TO US 13, CORRIDOR IMPROVEMENTS (CONTINUED)**

INDIVIDUAL PROJECT SEGMENTS	PHASE	FUNDING	EST COST TO COMPLETE IN TODAY'S \$	FY 2001 7/00-6/01 TOTAL	FY 2002 7/01-6/02 TOTAL	FY 2003 7/02-6/03 TOTAL	FY 2004 7/03-6/04 TOTAL	FY 2005-2007 7/04-6/07 TOTAL
<b>Transit Improvements</b>								
P. Additional Pedestrian Connections to Stops	PE C	100% ST 80% F – Q24	34 225	34		225		
Q. Additional Bus Stop Improvements	PE C	100% ST 80% F – Q40	68 450	68		450		
R. Park – n – Ride Preservation/Expansion	C	100% ST	900				900	
S. Route Deviation Service	TR	100% ST	1,550				1,550	
<b>Other Improvements</b>								
T. US 40 Signing and Streetscape Master Plan	PE C	100% ST 100% ST	90 290	90	290			
U. Access Management on Developing Properties	PE C	100% ST 80% F	50 680	50				680
V. US 40 Streetscape	C	80% F	<u>2,200</u>	_____	_____	_____	_____	<u>2,200</u>
		TOTAL	56,003	5,589	8,872	9,900	15,051	16,591

**All \$ X 1,000**